What does the surgeon need from the radiologist

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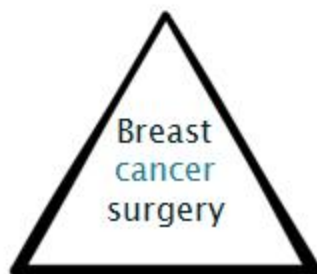
A prof of surgical oncology

Introduction

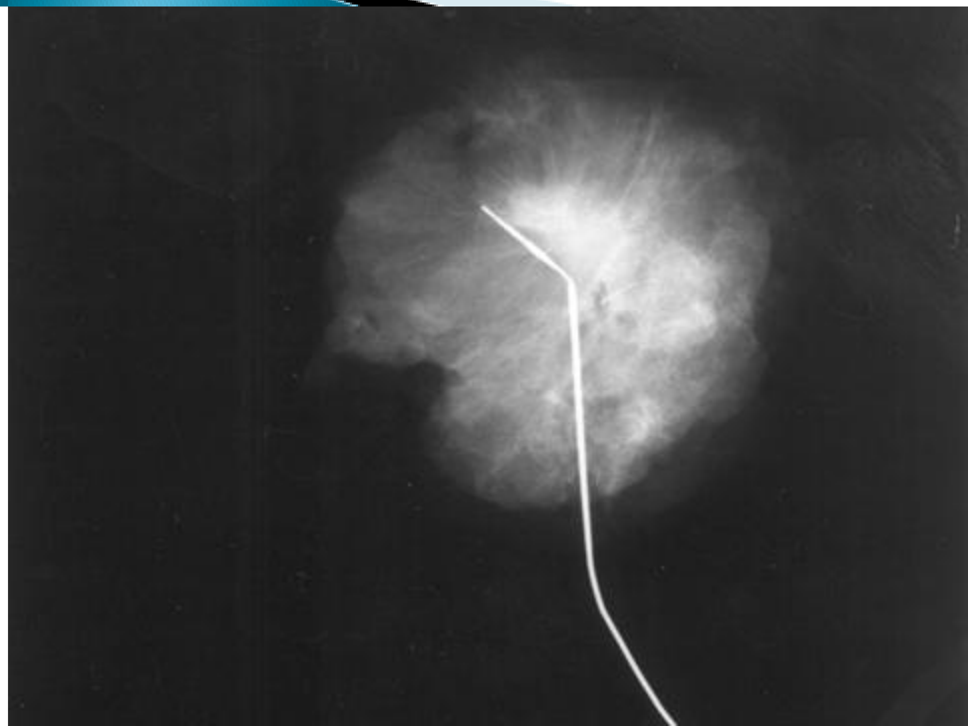
- Breast cancer is the second leading cause of mortality
- Improving disease outcome can be largely based on multidisciplinary approach for management of breast cancer including surgeon ,oncologist, radiologist , pathologist , Psychologist and nurse (manosmed statements Bucharest 2012)

surgeon



pathologist

radiologist



Breast imaging plays important role in

- Screening for breast cancer ,
- Classifying
- Sampling non-palpable breast abnormalities,
- Defining the extent of breast tumors.

Screening mammogram

- About 75% of breast cancer can be found mammographically up to a year before they become clinically palpable.

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Breast cancer screening can lead to 'overdiagnosis': radiologist is the 'voice of reason'

The radiologist provides guidance for taking the biopsy , or actually performs the biopsy or complete excision

workshop by Prof Naglaa Abdelrazik

The radiologist decides whether to send a breast sample for biopsy or not

- There is a delicate balance for the radiologist between diagnosing too many things to be biopsied, and diagnosing too few. They have to 'self-tune' in terms of their own thresholds in terms of image findings which actually turn out to be breast cancer (or something else serious enough to be biopsied) and benign or insignificant findings.

The radiologist and surgeon work together to plan surgeries

- Efficient cooperation between the radiologist and surgeon in all cases but especially in radiological detected lesions where the radiologist must present a detailed report of the technique used to localize the suspicious lesion
- Relation and angle of the guide wire to the actual site of the lesion and instructions to the surgeon if the technique needs to be modified

staging for the breast cancer

- Accurate staging of breast cancer preoperatively is the key for successful treatment plan
- Metastatic workup which is performed by radiologists are sometimes misleading leading to over or under diagnosis of suspicious mets lesions that tends out to be artifacts causing either delay in the management while waiting for more accurate diagnosis with the effect on the pt for this delay

- We have also the dilemma of which ideal investigation of metastatic detection: (CT) whole body MRI , Pet scan , just simple plain Xrays and US
- Also another question is that

(Is met workup really indicated in all cases of breast cancer)

- Local staging may be also of great dilemma with differentiation of DCIS and invasive cancer
- Actual extent of DCIS and correlation between mammographic abnormality and actual extent of the lesion
- Lobular cancer staging and how best it can be done (mammography or MRI)

Post-treatment mammography

- Post operative changes , radiation exposure , FB reaction , presence of implant all can affect the technique and the results of post treatment radiology
- What is the ideal time to do post treatment mammography to avoid many problems which occur when referring patients to medical oncologists asking for base line radiography before starting treatment suspecting residual lesions or recurrences
- Is MRI always indicated instead of mammography for follow up of breast conservation

Radiologist role in follow up of breast reconstruction patients

- Follow up of patients after breast reconstruction represents both clinical and radiological difficulty
- We still see anxious patients who refuse to have reconstruction based on the claim that this may hide local recurrence

- After flap based reconstruction areas of fat necrosis or muscle fibrosis may present as hard ill defined lumps
- Patients and clinicians need to be assured and explained that appropriate technique and timing of follow up of these patients are available and can detect any recurrence with great accuracy

- Radiologists must be decisive rather than causing more dilemma by asking for other radiologic modality hoping it would give a better clarification of nature of lesions

- Cooperation between radiologists and clinicians treating cancer and having a real specialized multidisciplinary team committed to the management of breast cancer is of paramount importance in achieving best outcome

- I would like to THANK all radiologists for their efforts in helping us on all these domains and encourage them to do more and encourage breast radiology subspecialist more as we always see better results from radiologists with breast radiology subspecialty

- I also would like to encourage all my colleagues to cooperate more with their radiologists especially in providing them with the feed back

as this will definitely improve the skills of both radiologists and the clinicians

Thank you